NP – 1025

VI Semester B.C.A. Examination, June/July 2025
(NEP Scheme) (F+R)
COMPUTER APPLICATIONS
CA - E2 : b) Software Testing (Elective – II)

Time : 2½ Hours Max. Marks : 60

Instruction : *Answer* ***all*** *the Parts.*

PART – A

I. Answer **any four** questions, **each** question carries **two** marks. **(4×2=8)**

1) What is boundary value testing ?
2) Differentiate between validation and verification.
3) What is slice based testing ?
4) Define system level threading.
5) What are equivalence classes ?
6) What is Bottom-up integration testing ?

PART – B

II. Answer **any four** questions. **Each** question carries **five** marks. **(4×5=20)**

7) Explain software testing life cycle.
8) Explain the class test case for triangle problem.
9) Differentiate between conventional testing vs object oriented testing.
10) Write a note on GUI (Graphical User Interface) testing in detail.
11) Explain random testing, mention its advantages and disadvantages.
12) State the difference between black-box and white-box testing (BBT and WBT).

P.T.O.

PART – C

III. Answer **any four** questions. **Each** question carries **eight** marks. **(4×8=32)**

13) Explain the testing strategy for Simple ATM system (SATM). **8**

14) Explain commission problem with all its possible conditions. **8**

15) Explain Test-then-code cycle with example. **8**

16) a) What is use case based testing ? Explain its key concepts. **4**

b) Explain components of decision table. **4**

17) Explain levels of testing in different life cycle models. **8**

18) a) Explain Weak Normal Equivalence Class Testing (WNECT). **4**

b) Explain types of threads in system testing. **4**

NP – 1022

VI Semester B.C.A. Examination, June/July 2025
(NEP Scheme) (F+R)
COMPUTER APPLICATIONS
CA 28 : Mobile Application Development

Time : 2½ Hours Max. Marks : 60

***Instruction** : Answer **any four** questions from **each** Part.*

PART – A

I. Answer **any four** questions. **Each** question carries **two** marks. **(4×2=8)**

1) What is the function of GPS in Mobile Device ?
2) What is content provider in Android ?
3) What is intent in Android ?
4) Define spinner view in Android.
5) Name any two features of SQL lite.
6) Write any two methods of content provider.

PART – B

II. Answer **any four** questions. **Each** question carries **five** marks. **(4×5=20)**

7) Explain the various stages of mobile application development.
8) Explain linear layout with an example.
9) Explain how to use datepicker in activity code with example.
10) How does a scroll view helps in handing different screen sizes in Android ?
11) Explain the key points on E-mail messaging in Android.
12) What is content resolver ? Write the features of content resolver.

P.T.O.

PART – C

III. Answer **any four** questions. **Each** question carries **eight** marks. **(4×8=32)**

13) Explain the steps in publishing android application.

14) What is dialog in Android ? Explain the types of dialogs.

15) Discuss the working flow on content provider in Android.

16) Explain image button along with attributes and features. Give an example.

17) What is menu in Android Studio ? Explain the steps of creating menu.

18) Explain the steps to integrate google maps into an android application.

NP – 1023

VI Semester B.C.A. Examination, June/July 2025
(NEP Scheme)(F+R)
COMPUTER APPLICATIONS
CAV 2 : Electronic Content Design (Vocational – II)

Time : 2½ Hours Max. Marks : 60

***Instruction** : Answer **all** the Parts.*

PART – A

I. Answer **any four** questions. **Each** question carries **two** marks. **(4×2=8)**

1) What is E-Learning ? Write its benefits.

2) Write any two characteristics of Millennial Learners.

3) What is SCORM ?

4) Write the advantage of wireframing in UX Design.

5) Define CSS.

6) Write the features of Wordpress.

PART – B

II. Answer **any four** questions. **Each** question carries **five** marks. **(4×5=20)**

7) Explain the role of Learning Management System (LMS) in the E-Learning environment.

8) Explain the best practices of online learning.

9) What is ASSURE model ? Explain with its advantages and disadvantages.

10) Explain the concepts of Color theory principles in digital media design.

11) What are the key elements of User Experience (UX) design ?

12) What is social media calendar ? Explain the steps involved in developing a social media content calendar.

P.T.O.

PART – C

III. Answer **any four** questions. **Each** question carries **eight** marks. **(4×8=32)**

13) a) Explain different tools to create online course. **4**

b) Explore the future of E-content. **4**

14) Explain the phases in the design and development of E-content. **8**

15) a) Explain different types of learning objects. **4**

b) Write a note on reusability of E-content. **4**

16) What is prototyping ? Explain different types of prototyping. **8**

17) a) Explain importance of image editing in graphic design. **4**

b) Define typography. Write its importance in design. **4**

18) a) Explain the importance of HTML and CSS for E-content Development. **4**

b) Explain the role of copyright and ethics in digital content. **4**

NP – 1021

VI Semester B.C.A. Examination, June/July 2025
(NEP Scheme) (F+R)
COMPUTER APPLICATIONS
CA 27 : Machine Learning

Time : 2½ Hours Max. Marks : 60

Instructions : *1) Read **all** questions **carefully** and answer **accordingly**.*
*2) Answer **all** Sections.*

SECTION – A

I. Answer **any four** questions. **Each** question carries **two** marks. **(4×2=8)**

1) What is machine learning ?

2) Write any two applications of supervised Machine Learning.

3) What is Data Preparation and Data transformation ?

4) What is clustering ?

5) Give a brief example for regression problem.

6) What is Image segmentation ?

SECTION – B

II. Answer **any four** questions. **Each** question carries **five** marks. **(4×5=20)**

7) Why Python is preferred choice for Machine Learning Application ?

8) Write a python code to import Csr file using pandas library.

9) What is re-inforcement learning ? Write two applications of it.

10) Explain difference between regression and clarification.

11) How Naïve Bayes classifier works ?

12) What is CART method ? How it works ?

P.T.O.

SECTION – C

III. Answer **any four** questions. **Each** question carries **eight** marks. **(4×8=32)**

13) Explain phases of building machine learning model.

14) What is NumPy and Pandas ? Why it is needed for ML ? Explain its features.

15) a) How pre-processing phase will help to get better performance of the model ?

b) Write the python code to demonstrate K-Mean Clustering.

16) a) Explain decision tree algorithm.

b) Explain K-NN Algorithm.

17) Mention the advantages and disadvantages of Linear models.

18) How clustering is used in Semi-Supervised Learning ?
